<u>Listing of the Claims</u>

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

1 – 48 (cancelled)

49. (currently amended) A method for detecting coronary artery disease in a human test subject, <u>said method</u> comprising:

a) ~~Q~~<u>q</u>uantifying ~~in RNA of a blood sample from said test subject,~~ a level of RNA encoded by ~~the gene~~<u>a</u> CRTAM (cytotoxic and regulatory T cell molecule) <u>gene</u> in ~~said~~ <u>a</u> blood sample <u>from said test subject</u>; and

b) ~~C~~<u>c</u>omparing said ~~quantified~~ level <u>of step (a)</u> with a quantified level of ~~control~~ RNA encoded by said gene in ~~RNA of~~ blood samples from control subjects <u>having coronary artery disease</u>;

wherein ~~said comparison of~~<u>a</u> determination in step (b) of a statistically significant similarity between</u> said ~~quantified~~ level of step (a) ~~with~~ <u>and</u> said quantified level of <u>RNA in said blood samples from</u> said control subjects is indicative of coronary artery disease in said human test subject.

50. (cancelled)

51. (cancelled)

52. (cancelled)

53. (cancelled)

54. (cancelled)

55. (cancelled)

56. (cancelled)

57. (cancelled)

58. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease is indicative of coronary artery disease in said human test subject.

59. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease is indicative of coronary artery disease in said human test subject.

60. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample, which has not been fractionated into cell types, from said test subject; and

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects is indicative of coronary artery disease in said human test subject.

61. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample, which has not been fractionated into cell types, from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease is indicative of coronary artery disease in said human test subject.

62. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample, which has not been fractionated into cell types, from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control

subjects, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease is indicative of coronary artery disease in said human test subject.

63. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject; and

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects is indicative of coronary artery disease in said human test subject.

64. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease is indicative of coronary artery disease in said human test subject.

65. (New) A method for detecting coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein a determination in step (b) of a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and a determination in step (c) of a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease is indicative of coronary artery disease in said human test subject.

66. (New) A method of testing for coronary artery disease in a human test subject, said method comprising:

a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample from said test subject;

b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood samples from control subjects having coronary artery disease;

wherein said comparison results in a determination of a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood samples from said control subjects.

67. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease.

68. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease.

69. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample, which has not been fractionated into cell types, from said test subject; and

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein there is a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects.

70. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample, which has not been fractionated into cell types, from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease.

71. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample, which has not been fractionated into cell types, from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and said comparison of step (c) results in a statistically significant

similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease.

72. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject; and

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein said comparison results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects.

73. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease.

74. (New) A method for testing for coronary artery disease in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by a CRTAM (cytotoxic and regulatory T cell molecule) gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease.

75. (New) A method of detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample from said test subject;

b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood samples from control subjects having coronary artery disease;

wherein said comparison results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood samples from said control subjects,

thereby detecting expression of said CRTAM gene in said test subject.

76. (New) A method of detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease,

thereby detecting expression of said CRTAM gene in said test subject.

77. (New) A method for detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

Wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease,

thereby detecting expression of said CRTAM gene in said test subject.

78. (New) A method for detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample, which has not been fractionated into cell types, from said test subject; and

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects,

thereby detecting expression of said CRTAM gene in said test subject.

79. (New) A method for detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample, which has not been fractionated into cell types, from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease,

thereby detecting expression of said CRTAM gene in said test subject.

80. (New) A method for detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample, which has not been fractionated into cell types, from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy

control subjects, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease,

thereby detecting expression of said CRTAM gene in said test subject.

81. (New) A method for detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject; and

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein said comparison results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subject,

thereby detecting expression of said CRTAM gene in said test subject.

82. (New) A method for detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects not having coronary artery disease; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease;

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said control subjects not having coronary artery disease, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in blood from said control subjects having coronary artery disease

thereby detecting expression of said CRTAM gene in said test subject.

83. (New) A method for detecting expression of a CRTAM (cytotoxic and regulatory T cell molecule) gene in a human test subject, said method comprising:

(a) quantifying a level of RNA encoded by said CRTAM gene in a blood sample which comprises leukocytes which have not been fractionated into cell types from said test subject;

(b) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from healthy control subjects; and

(c) comparing said level of step (a) with a quantified level of RNA encoded by said gene in blood from control subjects having coronary artery disease,

wherein said comparison of step (b) results in a statistically significant difference between said level of step (a) and said quantified level of RNA in blood from said healthy control subjects, and said comparison of step (c) results in a statistically significant similarity between said level of step (a) and said quantified level of RNA in said blood from said control subjects having coronary artery disease,

thereby detecting expression of said CRTAM gene in said test subject.

84. (New) The method of any one of claims 60, 61, 62, 69, 70, 71, 78, 79, and 80, wherein said quantified level of RNA in blood from said control subjects having coronary artery disease is a level of RNA encoded by said gene in samples of blood which have not been fractionated into cell types.

85. (New) The method of any one of claims 61, 70, and 79, wherein said quantified level of RNA in blood from said control subjects not having coronary artery disease is a level of RNA encoded by said gene in samples of blood which have not been fractionated into cell types.

86. (New) The method of any one of claims 62, 71, and 80, wherein said quantified level of RNA in blood from said healthy control subjects is a level of RNA encoded by said gene in samples of blood which have not been fractionated into cell types.

87. (New) The method of any one of claims 63, 64, 65, 72, 73, 74, 81, 82, and 83, wherein said quantified level of RNA in blood from said control subjects having coronary artery disease is a level of RNA encoded by said gene in a blood sample which comprises leukocytes which have not been fractionated into cell types.

88. (New) The method of any one of claims 64, 73, and 82, wherein said quantified level of RNA in blood from said control subjects not having coronary artery disease is a level of RNA encoded by said gene in a blood sample which comprises leukocytes which have not been fractionated into cell types.

89. (New) The method of any one of claims 65, 74, and 83, wherein said quantified level of RNA in blood from said healthy control subjects is a level of RNA encoded by said gene in a blood sample which comprises leukocytes which have not been fractionated into cell types.

90. (New) The method of any one of claims 49, and 58-83, wherein said quantifying of said level of step (a) is effected by quantifying a level of RNA encoded by said gene in a sample of RNA isolated from said blood sample of step (a).

91. (New) The method of any one of claims 49, and 58-83, wherein said quantified level of RNA in blood from said control subjects having coronary artery disease is a level of RNA encoded by said gene in samples of RNA isolated from blood from said control subjects having coronary artery disease.

92. (New) The method of any one of claims 58, 61, 64, 67, 70, 73, 76, and 79 , wherein said quantified level of RNA in blood from said control subjects not having coronary artery disease is a level of RNA encoded by said gene in samples of RNA isolated from blood from said control subjects not having coronary artery disease.

93. (New) The method of any one of claims 59, 62, 65, 68, 71, 74, 77, and 80, wherein said quantified level of RNA in blood from said healthy control subjects is a level of RNA encoded by said gene in samples of RNA isolated from blood from said healthy control subjects.

94. (New) The method of any one of claims 49, and 58-83, wherein said quantifying of said level of step (a) is effected by quantifying a level of cDNA corresponding to RNA encoded by said gene.

95. (New) The method of claim 94, wherein said quantifying of said level of cDNA is effected using quantitative PCR.

96. (New) The method of claim 49, and 58-83, wherein said quantified level of RNA in blood from said control subjects having coronary artery disease is a level of cDNA corresponding to RNA encoded by said gene.

97. (New) The method of claim 58, 61, 64, 67, 70, 73, 76, and 79, wherein said quantified level of RNA in blood from said control subjects not having coronary artery disease is a level of cDNA corresponding to RNA encoded by said gene.

98. (New) The method of any one of claims 59, 62, 65, 68, 71, 74, 77, and 80, wherein said quantified level of RNA in blood from said healthy control subjects is a level of cDNA corresponding to RNA encoded by said gene.

99. (New) The method of claim 97, wherein said level of cDNA corresponding to RNA encoded by said gene is a level quantified using quantitative PCR.

100. (New) The method of claim 98, wherein said level of cDNA corresponding to RNA encoded by said gene is a level quantified using quantitative PCR.

101. (New) The method of any one of claims 49, and 58-83, wherein said quantifying of said level of step (a) is effected by quantifying a level of RNA encoded by said gene relative to a level of RNA encoded by a housekeeping gene.